
BACTRIS DIVISICUPULA AND BACTRIS FUSCOSPINA REEXAMINED

Work on a forthcoming paper on the palms of western San Blas, Panama required the determination of similar-looking specimens labeled *Bactris divisicupula* Bailey (Palmae, Cocoeae) or *B. fuscospina* Bailey. Bailey (1943a) described both species, from one specimen each, from semi-isolated peaks in west-central Panama. The type collections actually intergrade, and collections since then also bridge the distinctions, indicating that the two taxa are synonymous.

Bailey (1943b) used the following couplet to distinguish the types of *B. divisicupula* (Allen 1817) and *B. fuscospina* (Allen 2086):

- e. Pinnae short-caudate or only acuminate, marked on upper surface with cross-lines between the nerves: cupule of an outer series (calyx) of 3 deep lobes and an inner series (corolla) with nearly entire margin and setose *B. fuscospina*
- ee. Pinnae long-caudate and [with] no elevated cross-lines: cupule divided into deep lobes in both series *B. divisicupula*

Collections amassed since 1943 demonstrate that leaf shape and venation in this species are variable and do not provide consistent separation. Allen 2086 bears an inflorescence just past flowering, while Allen 1817 has mature fruits. The difference in developmental stages may have been a reason Bailey described two species. He stated (1943a: 230) that the setae of the calyx of *B. fuscospina* (from the less-developed material of Allen 2086) are “likely to perish with handling,” which does occur, thus rendering the vestiture indistinguishable from that of the more-developed *B. divisicupula*. Allen 1817 actually retains some setae on the calyx, identical to those of Allen 2086. The lobing of the “cupule” (corolla) is also an artifact of development, the corolla being parted into lobes by the expanding fruit.

I here include *B. fuscospina* in synonymy with *B. divisicupula*.

Bactris divisicupula Bailey, Gent. Herb. 6: 230. 1943. TYPE: Panama. Cocle: El Valle de Antón, 21 May 1939, Allen 1817 (holotype, MO; islectotypes, BH, GH, here designated).

B. fuscospina Bailey, Gent. Herb. 6: 228. 1943. TYPE: Panama. Panamá: Cerro Campana, 31 Dec. 1939,

Allen 2086 (holotype, MO; islectotype, BH, here designated).

Bailey did not designate a holotype. The BH and GH specimens are fragments. The description appears to be based on the MO sheet, which is the only one containing the information included in the description. For these reasons the MO duplicate is here chosen as lectotype.

When Bailey described the two palms, the flowers were unknown. The collections *de Nevers* 6127, *Moore* 6531, and *Johnston* 1552 allow the following description:

Flowers crowded on the rachillae; pistillate flowers in triads with 2 staminate flowers; the triads mixed with numerous solitary staminate flowers in proximal third of rachillae; distal $\frac{2}{3}$ of rachillae with exclusively staminate flowers; staminate sepals 3, unequal, linear, connate at base, 1 mm long; staminate petals connate in lower third, free and valvate above, 5 mm long, thick, apically acute, inequilateral; stamens 6, the filaments adnate to the petals basally, free distally, twice folded or bent, ca. 2 mm long; anthers ovate, dorsifixed just below the middle, dehiscing longitudinally; pistillode minute; pistillate sepals connate into a vertically striate tube 3–4 mm long, minutely 3-lobed at apex; pistillate petals connate into a tube 2 mm long, truncate to obscurely 3-lobed apically, minutely spinescent without, striate within; staminodes absent; stigma sessile, truncate, 0.5 mm long; ovary oblong. Ovule basal.

Bailey (1943a) described the rachillae of the two species as “pubescent” (*B. divisicupula*) and “indifferently pubescent” (*B. fuscospina*). The pubescence is strongly eroded in the material he saw: the indument of the rachillae is a dense mat of multicellular hairs, each reminiscent of a string of beads. *Moore* 6531 has these hairs well developed and is unique among the flowering specimens seen in having the spinescent indument of the corolla tube continue onto the rim of the tube as a fringe.

Bactris divisicupula ranges from the provinces of Limón and Puntarenas in Costa Rica to the Department of Valle in Colombia. It inhabits tropical moist forest, tropical wet forest, premontane wet forest, and premontane rain forest (sensu Hold-

ridge et al., 1971) between sea level and 1,000 meters. The Colombian material has larger fruits than the Panamanian material and may tie *B. divisicupula* to additional specimens at MO from Amazonian Peru and Venezuela. Comparison with the Amazonian material is deferred to a later date pending collections from Amazonian Colombia and Ecuador.

Additional specimens examined. COSTA RICA. LIMÓN: woodlands S of La Lola on the railroad, 120 m, 15 Apr. 1953, *Moore 6711* (BH). PUNTARENAS: Palmar, 6 Mar. 1956, *Schubert 1184* (A). PANAMA. CANAL AREA: Skunk Hollow, Caribbean side, 22 Oct. 1965, *Blum 1496* (MO); Pavón Road W of Gatún Locks, 4 Aug. 1955, *Johnston 1538* (BH); near Marú Towers W of Gatún Locks, *Johnston 1552* (BH); Pipeline road near Gamboa, 50 m, 7 Nov. 1973, *Nee 7846* (MO, NY); Frijoles, 20 Aug. 1923, *Stevens 1185* (US); Agua Salud, 13 July 1923, *Cook & Martin 63* (US); Barro Colorado Island, 6 July 1931, *Bailey 505* (BH). COLÓN: Santa Rita Ridge, 8 Apr. 1971, *Croat 14182* (MO). DARIÉN: Urutí River, *Duke & Bristan 220* (MO, US). PANAMÁ: Cerro Campana, 31 Mar. 1969, *Dwyer, Croat & Castillón 4859* (BH, MO); Cerro Azúl, 26 July 1970, *Croat 11551* (MO); 3 mi. NE of Alto Pacora, 500–800 m, 10 Mar. 1973, *Croat 22767* (MO); Cerro Jefe, 23 Apr. 1946, *Allen 3440* (BH, MO); El Llano–Cartí road km 8, 5 Mar. 1974, *Nee & Warmbrodt 10400* (MO). COMARCA DE SAN BLAS: El Llano–Cartí road km 19, 350 m, 9'19"N, 78'55"W, 2 Nov. 1985, *de Nevers, Herrera & Charnley 6127* (MO); Cangandi, 30 m, 9'24"N, 79'24"W, 10 Feb. 1986, *de Nevers & Herrera 7121* (MO); Cangandi, swampy flats, 10 m, 5 Apr.

1986, *de Nevers, Herrera & Charnley 7697* (MO); Aila Tiwar (Río Acla), 25–100 m, 8'48"N, 77'40"W, 12 Feb. 1979, *Sugden 430* (MO). COLOMBIA. CHOCÓ: La Mojarra, near Istmina, up Río San Juan, 30–90 m, 5'12"N, 76'37"W, 6 Nov. 1983, *Juncosa 1319* (MO); Hoya del Río San Juan, Quebrada La Sierpe, 5 m, 4'10"N, 77'10"W, 25 Mar. 1979, *Forero et al. 3966* (MO). VALLE: Río Naya upriver from Puerto Merizalde, 10 m, 3'15"N, 77'25"W, 23 Feb. 1983, *Gentry & Juncosa 40679* (MO).

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